



THE ALLENS HUB

FOR TECHNOLOGY, LAW & INNOVATION

A joint initiative of

Allens > < Linklaters



UNSW
SYDNEY

Annual Report

FOR THE PERIOD 1 JAN 2019 –31 DEC 2019

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About the Allens Hub

The Allens Hub for Technology, Law and Innovation is an independent community of scholars based at UNSW Sydney. As a partnership between [Allens](#) and [UNSW Law](#), the Hub adds breadth and depth to research on the diverse interactions among technological change, law, and legal practice. The partnership enriches academic and policy debates and drives considered reform of law and practice through engagement with the legal profession, the judiciary, industry, government, and the broader community.

The Hub aims to be a global leader in solving legal problems and communicating solutions and ideas arising from technological innovation. It is a collaborative base for researchers across multiple disciplines and people across multiple sectors to engage with questions arising from technological change and innovation. The Hub seeks to be forward-looking, developing creative, well researched solutions to emerging – and yet to emerge – problems. It is developing a prominent national and international profile through its members who are active in academic, industry and public debates about regulatory and policy change in these areas.

New technology poses challenges which cannot be resolved solely by legal scholarship focused on particular technological contexts repeated across each field of disruption. We need to understand the challenges through a broader historical, legal and policy frame with close attention to developments in other jurisdictions and genuine cross-disciplinarily. This requires a strong culture of collaboration to build flexible and resilient legal and regulatory systems that accommodate ongoing change and encourage appropriate innovation while providing appropriate governance and oversight and promoting equality and inclusiveness.

The Hub has secured three years of funding from Allens, and FLIP Stream (operating within the Hub) has secured five years of funding from the Law Society of NSW.

This Annual Report covers the second year of the Hub's operations.

The Allens Hub benefits from a Steering Committee and Advisory Board and is grateful to members of each, listed in the Appendix.

Directors' Reports

Lyria Bennett Moses – The Allens Hub

The Allens Hub has had a very eventful second year. We have focussed on ensuring an effective core Hub team, building expertise in an important domain where staff turnover had created a gap (in particular, cyber security law and policy), and focussing on research impact across a range of policy areas.

In order to enhance collaboration within the core Hub team, we moved first to the Centres Precinct on Level 1 of the Law Building. We ended the year with a move to our own physical 'Hub' on Level 3. Working in the same space has been crucial in aligning administrative and research elements of the Hub. In addition, we have created an annual timeline to better manage workload over the year, ensuring events are timed when the team has greatest capacity.

With the end of the Data to Decisions Co-operative Research Centre in June 2019, we have begun a fruitful collaboration with the Cyber Security Co-operative Research Centre. Through this new partnership, we secured funding for a new cyber security law and policy research fellow, Dr Heejin Kim, who commenced with us on 25 October 2019 and a summer scholarship student, Michael Murdocca. There are a range of cyber security projects which the Hub will be supported to work on including Heejin's first project looking at export restrictions on cyber-surveillance technologies and a project mapping laws relevant to cyber security and resilience. We are also hoping to procure a PhD scholarship and honours scholarships to build Australian capacity in cyber security law and policy more broadly.

The Hub has participated in a number of important submissions to law reform commissions and parliamentary and departmental inquiries, in order to ensure that our research is taken into account in the formulation of policy and the design of laws. While the full list appears on page 27, it is worth highlighting here the fruits of some of our interventions to date. Hub submissions and research were cited in the reports of the UN Special Rapporteur on the Right to Privacy (A/HRC/40/63, A/73/45712) and the Human Rights Commission's discussion paper on Human Rights and Technology, and our recommendations have been factored into the government's proposed data sharing and release reforms. Work from the Platforms Cooperativism stream has also been cited by the Australian Law Reform Commission.

We have also worked towards global impact through participation in the World Legal Summit, hosting the Sydney leg of this event on 1 August 2019. Not only was this an opportunity to engage with industry and government locally, our discussion was captured in a report (available [here](#)) and will be incorporated into a comparative international report. The focus of the first World Legal Summit was on digital identity, automated machines (we focussed on automated vehicles) and cyber security and data protection.

The foundation for our success is our members – researchers willing to engage with us on a variety of projects. There are currently 41 researchers and research students in the Hub, mostly but not exclusively based in the Faculty of Law at UNSW, whose research intersects with the Hub’s mission. Unlike research centres in some STEM disciplines, Hub members are not employed to engage exclusively on Hub projects. Thus, while some Hub members’ research aligns perfectly with the Hub, other researchers are joining us as they work on shorter term projects or in relation to a distinct part of their research agenda. Nevertheless, collectively, our members have produced a wide array of publications in 2019, and these are listed on page 22-26. This year, we have organised the list by topic rather than researcher to assist with navigation. A number of publications do not fit neatly into the Hub streams; as an open membership, we welcome people interested in broader questions at the intersection of technology, law and innovation. The Hub now also includes 2 reading groups, opportunities to present work in progress at Hub meetings, and support for events and other activities.

The Hub has funded six streams of research over the course of 2019 and supported an additional three streams. These Hub research streams exist in addition to the FLIP Stream, which is funded by the Law Society of New South Wales under the leadership of Professor Michael Legg. Each Hub research stream has a Stream Leader who is responsible for the budget allocated to that stream (where relevant) and the activities of the Stream. Streams were launched earlier in the year after all Hub members were given a chance to pitch their ideas, outline a plan of activities for 2019 and make a budget request. This led to creation of a new stream, on Technologies and the Rule of Law, led by Hub Fellow Dr Monika Zalnieriute.

Michael Legg – The FLIP Stream

The Future of Law and Innovation in the Profession Research Stream (FLIP stream) was created in November 2017 with the entry into a collaboration agreement between UNSW and the Law Society of New South Wales.

The FLIP stream is comprised of a Director, Deputy Director and Research Fellow. The Deputy Director is Dr Justine Rogers, senior lecturer at UNSW Law and the Research Fellow is Dr Felicity Bell who joined us from Wollongong Law School.

Research in the FLIP stream addresses the impact of technology and innovation on the legal profession. It builds on the work conducted by the Law Society of New South Wales that led to its ground-breaking Report on the Future of Law and Innovation in the Legal Profession (FLIP Report).

The research is organised around an annual topic and a number of smaller or longer-term research projects and responses to law reform and government inquiries.

In 2018 the annual topic was Artificial Intelligence and the Legal Profession. In 2019 the annual topic focused on Change leadership for lawyers. The 2019 topic involved research into the issues of change management and leadership for lawyers, exploring how organisations can create a change-ready culture where practitioners can confidently participate in and adapt to change. Dr Rogers and Dr Bell presented “Change leadership for a dynamic profession” at the Law Society’s 2019 FLIP Conference. Dr Bell was also part of the winning team in the Conference’s Great Debate, arguing for the negative on “The impending “Uberisation” of the legal services market is undesirable for the legal profession in Australia”. Flipstream also participated in the Law Society’s Regional Roadshows to locations such as Byron Bay and Wollongong.

2019 also saw a number of other highlights. The FLIP Seminar in the Supreme Court of New South Wales Banco Court which was opened by Chief Justice Bathurst with an endorsement of the need to consider how technology will affect the practise of law. The Chief Justice’s remarks are available from the Supreme Court’s website:

http://www.supremecourt.justice.nsw.gov.au/Documents/Publications/Speeches/2019%20Speeches/Chief%20Justice/Bathurst_20190410.pdf The FLIP stream team presented on ‘Artificial Intelligence and the Legal Profession’ (Dr Bell and Prof Legg); ‘Technology, Innovation and Lawyer Wellbeing’ (Dr Bell and Dr Rogers) and ‘The Future of Courts - Disruption Under Law’ (Prof Legg). The seminar concluded with a panel discussion on the future of legal education by the Deans of Newcastle (Prof Tania Sourdin), Wollongong (Prof Colin Picker) and UNSW Law Schools (Prof George Williams).

The FLIP stream team also published a number of articles and book chapters. The Macquarie Law Journal special edition “Technology and civil dispute resolution” was guest edited by Dr Bell and Prof Legg, whom also contributed articles on the automation of family law and the internet of things, respectively. The journal is available here https://www.mq.edu.au/__data/assets/pdf_file/0008/866294/Macquarie-Law-Journal-Vol-19.pdf Dr Rogers and Dr Bell’s article, “The Ethical AI Lawyer: What is Required of Lawyers When They Use Automated Systems?” was published in the inaugural issue of Law, Technology and Humans, <https://lthj.qut.edu.au/issue/view/83>. Further, research into lawyer wellbeing and the impact of technology and innovation has culminated in chapters being contributed to J Marychurch and A Sifris (eds), *Wellness for Law: Making Wellness Core Business* (LexisNexis, 2019) and M Legg, P Vines and J Chan, *The Impact of Technology and Innovation on the Well-Being of the Legal Professional* (Intersentia, 2020).

Our People

Hub and Flip Stream staff

- Professor Lyria Bennett Moses, Hub Director
- Professor Michael Legg, Director of FLIP Stream
- Dr Justine Rogers, Deputy Director of FLIP Stream
- Ms Katrina Brookland, Administrator (0.6 FTE)
- Dr Monika Zalnieriute, Hub Research Fellow
- Dr Heejin Kim, Cyber Security CRC Research Fellow (commenced on 25 October)
- Dr Felicity Bell, FLIP Stream Research Fellow
- The Hub and FLIP Stream have supervised five interns this year. Shavin Wijeyaratne, Nayan Bhathela, Melanie Ling, Anthony Song and Emily Watson. In addition, Michael Murdocca has completed a Cyber Security Cooperative Research Centre Summer Scholarship with the Hub. Rachel Rowe and Danielle Hynes are two Scientia PhD scholars supervised by members of the Data Justice stream; they took an active role in organising the monthly reading groups and Data Justice stream events.

Advisory Board

The Allens Hub advisory board was formed this year to provide high-level advice. It consists of 16-17 members representing the legal profession, technology, industry, academia, government and policy. The board is intended as a high-level strategic reviewer and a sounding board to ensure that the Hub’s projects are important, relevant and have the potential for practical and/or policy impact. It provides exposure to a range of perspectives. The board meets twice a year. There were a few changes in 2019, including the departures of Daniel Petre and Maria Milosaljevic and the appointment of Rachael Falk.

There were two meetings on 8 April 2019 and 15 October 2019, focussing on:

- Breadth of strategic vision;
- Alignment of strategy and annual plan;
- FLIP Stream annual topics 2020-2022.

Steering Committee

The Allens Hub steering committee consists of six members who meet four times a year. There were two changes in its membership in 2019 – Justine Nolan was replaced by Andrea Durbach as the Dean’s nominee and Michael Tidball was replaced by Heather Moore as the Law Society of New South Wales appointee. The steering committee provides the primary mechanism through which both Allens and the Law Society of New South Wales can offer advice, direction and feedback concerning the Hub. It is also the Hub’s primary

governance body. There is a separate reporting line from the FLIP Stream Director to the Law Society of New South Wales. The four meetings occurred on 11 March, 19 June, 16 September and 18 November.

The steering committee is responsible for oversight of:

- Annual plans and reporting
- Annual budgets, including allocations to research streams
- Major events

Affiliated Researchers

The Hub currently has 41 researchers affiliated with it. They are:

Name	Research
Felicity Bell	future of legal profession and impact of technology, professional ethics and regulation, family and children law
Lyria Bennett Moses	theories and approaches to law and technological change; legal and policy issues for automation and data analytics; law pertaining to cyber security
Kathy Bowrey	intellectual property; technology and culture/history/politics/philosophy
Ross Buckley	FinTech; blockchain; data technologies in banking
Janet Chan	data technologies; technology and organisational cultures; technology for access to justice
Philip Chung	legal information services; technology for access to justice
Genna Churches	technology, telecommunications law, law enforcement and national security, public law, privacy law, and human rights law
Roger Clarke	dataveillance; responsible data analytics; cybersecurity risk management; RegTech
Caroline Compton	data science and its impact on humanitarianism and international development
Simone Degeling	equity and digital technologies
Marc de Leeuw	law and biology, including synthetic biology
Anton Didenko	digital financial services, FinTech and RegTech
Bassina Farbenblum	technology for migrant worker protection and access to justice
Alexandra George	intellectual property
Tahlia Gordon	future of the legal profession
Janice Gray	water governance, digital asses
Graham Greenleaf	legal information services; data privacy and data governance; technology for access to justice
Michael Handler	intellectual property
Samuel Hartridge	privacy and data security law, civil liability for data breaches, and law enforcement and mass surveillance
Jessica Hudson	equity and digital technologies
Vedna Jivan	professional legal practice
Fleur Johns	data governance and digital humanitarianism
Daniel Joyce	media law, human rights and data governance
Matthew Kearnes	STS; responsible innovations; public engagement
Matthew Keeley	online harms; technology use by children and young people
Katharine Kemp	digital financial services; competition law; data privacy
Dimitry Kingsford-Smith	future of legal profession; online investing regulation
Lesley Land	information security and management
Michael Legg	technology in litigation and dispute resolution; future of legal profession
Kayleen Manwaring	eObjects and Internet of Things; information technology and consumer protection; cyber security and corporate governance; network neutrality
Jennifer Moore	health law
Bronwen Morgan	sharing economy and technology platforms
Rob Nicholls	technology platforms and competition law; technology for access to justice
Justine Nolan	business and human rights
Michael Richardson	the intersection of affect, power and war through the lens of witnessing and testimony in culture, media and politics.
Justine Rogers	future of the legal profession; entry, socialisation and training; professional ethics and regulation
Nofar Sheffi	digital marketplace platforms; Terms of Service agreements; media theory and computer science

Alex Steel	technology in legal education, technology and criminal law
David Vaile	data governance; cloud computing
Marina Yastreboff*	*Marina is at UNSW Legal, but shares an interest in Hub research
Monika Zalnieriute	Information Policy and Internet Governance, human rights in the digital age, international data privacy law, and EU data protection law, data-driven discrimination, automation of government decision-making, LGBTI rights and feminist theory

Achievements - Hub

This Annual Report covers the 12 month period from 1st Jan 2019 to 31st Dec 2019. The Hub's Annual Plan for its second year of operations was built seven around pillars, including community, communications, engagement, research, impact and funding. Goals and Measures were outlined in the annual plan. These were intended as flexible and adaptable, to facilitate responses to new opportunities as they arise. The outcome of each of these, are set out in the table below.

Operation of core Hub team

Community

Comms

Engagement

Research

Impact

Funding

Pillar	Goal	Measure	Achievement
Enhance operations of core Hub team	Smoothly functioning core team as a means to deliver on all pillars	<ul style="list-style-type: none">• Design and implement 360-degree evaluation.• Incremental opportunities for improvements implemented over 2019.	<ul style="list-style-type: none">• Two physical re-locations of the core Hub team; since November in final purpose-built location.• Director underwent UNSW Carina leadership training program throughout 2019. This included a 360 degree evaluation of her leadership.

Pillar	Goal	Measure	Achievement
			<ul style="list-style-type: none"> Received feedback from Hub members concerning current Hub operations. Developed and using shared physical guides to control team workload – Year planner (including planning cycles, events, newsletters, evaluation, reporting). Experimenting with software for enhanced collaboration (Teams, OneNote) Regular core Hub team meetings established Revised budget and accounting process in collaboration with UNSW Finance
Community building	Hub meets the needs of its members, who gain real benefits from membership.	<ul style="list-style-type: none"> Annual survey of members showing we are enhancing opportunities for collaboration, impact and engagement. 	<ul style="list-style-type: none"> Hub members meetings are now less frequent but more engaging, incorporating works in progress and sharing of research. Member survey conducted, feedback incorporated into 2020 Annual Plan We continue to keep members apprised of opportunities and activities via explode email. We continue to provide opportunities that encourage researchers interested in issues at the intersection of technology, law and innovation to join the Hub We continue to encourage co-authorship, mentoring and collective projects. We currently support 2 reading groups.

Pillar	Goal	Measure	Achievement
			<ul style="list-style-type: none"> We continue to provide opportunities at Hub meetings to discuss current projects (round the table, posters, work in progress presentations). The cyber security law and policy stream will be relaunched by Dr Heejin Kim.
Communications	Continue to implement Communications Policy	<ul style="list-style-type: none"> Meet metrics in communications policy. 	<ul style="list-style-type: none"> Delays with website corrections (researchers and publications links) – complete April 2019; no longer possible to limit web publications to those directly related to the Hub (includes all publications for each researcher). Automated process of capturing Hub member publications for website and annual report. Continuing to engage on twitter @UNSWAllensHub, via website and via newsletter. Metrics below. Used to promote research, policy engagement and media mentions; also to advertise events. Format of annual report refined in response to suggestions from Advisory Board and members. Continuing to work with UNSW and Allens teams collaboratively.
Engagement	Be <i>recognised</i> as the Australian centre of scholarship in our field within: <ul style="list-style-type: none"> Australian academia International academia Australian legal profession Relevant policymakers Relevant segments of NGO community Media 	<ul style="list-style-type: none"> Favourable recognition of Hub brand and Hub researchers at domestic and international conferences. Media requests for comment on relevant issues. Requests from relevant policy-makers to comment/participate on relevant issues. Useful engagement with all stakeholders. 	<ul style="list-style-type: none"> Created stakeholder map (to be kept up to date). We continue to engage with our sponsors on joint events and participation in each other's events. Through these, we enhance engagement with industry/clients and the legal profession. We continue to engage with colleagues on the UNSW Law curriculum. New Data Science

Pillar	Goal	Measure	Achievement
	Develop Engagement Strategy.		<p>and Decisions / Law dual degree launched in 2019.</p> <ul style="list-style-type: none"> • Our plan to launch a new Law and Technology conference focusing on Asia/Australia and incorporating the Junior Scholars Forum has been delayed until late 2020 due to time taken to develop partnerships. • We hosted the World Legal Summit in Sydney on 1 August 2019. • We continue to build on networks across UNSW, through: <ul style="list-style-type: none"> ○ Joint events ○ Partnership with new Cyber Security Centre (CyRIN) in Engineering. ○ Joint (unsuccessful) funding bid with Centre for Big Data Research in Health. ○ Data Justice stream and related reading group, with broad representation across disciplines. ○ Hub members based in other faculties (in particular Business) and other Centres (eg Austlii) ○ Engagement with Digital Grid Futures Institution (re energy law and policy) ○ Partnership with Gilbert + Tobin Centre for Public Law through Technologies and the Rule of Law stream.

Pillar	Goal	Measure	Achievement
			<ul style="list-style-type: none"> We continue to develop links with other sectors (community legal centres, industry, legal profession, government). Growing links internationally, particularly with similar centres in US, Europe and Asia. We continue to engage with UNSW students around Hub themes and participate in relevant student events and mentoring programs. The Annual Hub Lecture was postponed until 30 April 2020 (better timing than pre-Christmas) [ultimately cancelled due to COVID-19]. Engaging with legal tech community through Global Legal Tech Venture Day in 2020.
Research	Build on law, technology and innovation as an area of strength at UNSW Law.	<ul style="list-style-type: none"> Since 2018 was first year of data collection, develop qualitative metrics for measuring research in this area. Continue to meet separate FLIP Stream research targets. 	<ul style="list-style-type: none"> Seed grant funding through research streams – intention is that after 2-3 years, streams will become self-sustaining. We have improved stream reporting processes with bi-annual meetings with stream leads. Improved collaborations with library for data collection. Process has been developed whereby library will supply a quarterly report of hub-related publications members have entered into ROS database. This report is passed to Allens. The data is captured in annual reports. Annual report format changed to include description of stream research and link with stream objectives. This provides qualitative support that the streams are working towards their research goals.

Pillar	Goal	Measure	Achievement
			<ul style="list-style-type: none"> We continue to encourage publications within research streams and on broad Hub themes. We continue to encourage high impact activities within research streams including events, submissions, presentations, media interviews, and talks (see events list pp 16-20). We continue to meet FLIP Stream research targets. We are responding to research suggestions by the advisory board. We have re-introduced the cyber security stream. We have made submissions related to ethical issues in AI (including to Human Rights Commission and in relation to proposed identity-matching legislation). Roger Clarke also publishes extensively in this area. Kayleen Manwaring's work on eObjects also crosses into smart cities and a collaboration with the Digital Grid Futures Institute may emerge after completion of her PhD.
Impact	Build on Hub's reputation for sound, research-based policy advice in areas of expertise.	<ul style="list-style-type: none"> 5+ submissions on topics related to Hub's research streams per year Begin to measure impact from 2018 submissions through policy-making process. 	<ul style="list-style-type: none"> We made 19 submissions in 2019 The impact of earlier submissions is noted in Director's Report. Political engagement and engagement with public service ongoing
Funding	Put Hub in a good position for grant applications in 2019.	<ul style="list-style-type: none"> At least 2 additional grant applications by 30 April 2020 involving Hub research streams. 	<ul style="list-style-type: none"> Consultancy in 2019 with Department of Education (NSW). Some grants held/obtained by Data Justice network members. Working towards research funding application in Technologies and the Rule of Law stream.

Pillar	Goal	Measure	Achievement
			<ul style="list-style-type: none">• Partnership with Cyber Security Co-operative Research Centre established, providing vehicle for project funding.• One unsuccessful bid in 2019.• Digital Grid Futures Institute unable to fund position in Law; unable to hire expert in regulation of electricity infrastructure.

Challenges

- Leaking on Level 1 of the Law Building delayed the opportunity for the core Hub team to work in the same space. However, we are now working together here, and looking forward to moving to an even better purpose-built space on Level 3.
- Securing large grant funding *as a Hub* continues to be a problem, with an unsuccessful bid in 2019. However, we have secured a range of smaller grants and consultancies. There are grants held by Hub members, but some predate the Hub's launch. We continue to work on new grant applications.
- Digital Grid Futures Institute's funding was more restricted than originally proposed, removing the option of appointing an expert in electricity grid regulation into the Law Faculty and the Hub. However, we continue to collaborate with them at a more general level.

Research Streams

The steering committee approved the following research streams for 2019:

- **Data Justice:** clarifying both how data justice arises as a problem in need of addressing and how it can be defined, measured, and delivered in different social and organisational settings.
- **FinTech:** looking at the legal implications of a variety of technology-driven developments in finance
- **Data as a source of market power:** exploring the impact of control of data on market power and implications for competition law.
- **Technology for migrant worker protection and access to justice:** scrutinising digital technology initiatives designed to prevent exploitation and improve recruitment and working conditions for migrant workers.
- **Data protection and surveillance:** investigating the nature and implications of developments in personal data informatics and analytics for the protection of individual, community, professional and public interests in data protection, privacy and confidentiality.
- **Platform co-operativism:** melds the tools of the digital economy with long-standing cooperative business models, opening opportunities for business model innovation that can better foster sustainable economic development, supported by creative legal models for enterprise and new modes of professional services. Examples include fairbnb <https://fairbnb.coop/> and Bhive: <https://bhive.coop/>
- **Hybrid life and legal personhood:** probing the changing concept of legal personhood in light of new "hybrid" entities.
- **Reinventing intellectual property:** considering the impact of new technologies on IP's foundational concepts and categories.
- **Technologies and the Rule of Law:** in partnership with the Gilbert + Tobin Centre for Public Law, explores the relationship and tension between one of the most iconic social values - the rule of law - and an increasing reliance on automation in government decision-making.
- **Cyber security law and policy:** focusing on regional and trade issues for cyber security and surveillance technologies.
- **The FLIP Stream annual topic for 2019:** Change Leadership for a Dynamic Profession

Events

The Allens Hub have been involved in and/or hosted the following events to mid-Sep –2019. The Hub was mentioned in some capacity in all of the following.

- Regular Data Justice reading groups
- Regular Data Justice group meetings
- Regular reading with Cornelia Vismann groups

- Member involvement in the UN Global Pulse in association with the Data Science in Humanitarianism
- **Feb 2019** Data as a Source of Market Power stream co-lead Katharine Kemp presents at National Consumer Congress, Melbourne
- **8 Feb** Allens Hub hosted Rolf Weber talk on Smart Contracts do we need New Legal Rules
- **15 Feb** Hub director Lyria Bennett Moses presents, 'Automated decision-making at the rule of law', paper at G&T Centre's Constitutional Law Conference, Sydney
- **16 Feb** Hub director Lyria Bennett Moses presents to ANZSOG students on 'Regulating in the Face of Socio-Technological Change'
- **20 Feb** Hub director Lyria Bennett Moses chairs UNSW Engineering alumni event panel on Engineering the Future
- **28 Feb and 7 Mar** Data as a Source of Market Power stream leads Katharine Kemp and Rob Nicolls present at Allens 17th Competition law fests in Sydney and Melbourne
- **Mar 2019** Data as a Source of Market Power stream co-lead Katharine Kemp provides keynote at Dvara Research Annual Conference, Chennai, India
- **12 Mar** Hub Director Lyria Bennett Moses participates in Allens corporate counsel series on Ethical issues at the intersection of technology and the law
- **15 Mar** Hub hosts talk on collective intelligence by professor Aelita Skaržauskienė
- **18 Mar** Hub Director Lyria Bennett Moses participates as panelist in Allens student event, Introduction to legal tech
- **20 Mar** Hub hosts talk on 'Separating Canadian copyright myths from reality: fair dealing, user rights, ISP liability, site blocking & more' by Michael Geist
- **27-29 Mar** Hub research fellow Monika Zalnieriute presents on 'Implications for the Rule of Law in Government Decision-Making' at the Ethics of Data Science Conference, University of Sydney, Australia
- **29 Mar** Hub Director Lyria Bennett Moses participants as panellist at the Ethics of data science conference
- **11 Apr** Hub Director Lyria Bennett Moses speaks at the NSW Department of Education's Catalyst Lab Innovation Program Directorate
- **29 Apr** Hub Director Lyria Bennett Moses invited to speak at the Law & New Technologies Conference.
- **May 2019** Data as a Source of Market Power stream co-lead Katharine Kemp presents at Digital Competition in Digital Markets Conference, Competition Policy International and Melbourne University
- **1 May** Hub Director Lyria Bennett Moses participates in podcast with NSW Department of Education on how artificial intelligence is changing the world around us
- **3 May** Data as a Source of Market Power stream leads Katharine Kemp and Rob Nicolls organise and co-chair Data Protection breakfast held at Allens
- **9 – 11 May** Hub director Lyria Bennett Moses, Rule of Law and Automation of Government Decision-Making; Rule of Law "By Design", presentation at Inaugural Conference of the IACL Research Group on Algorithmic State, Society and Market – Constitutional Dimensions, Florence Italy,
- **14–16 May** Hub Research fellow Monika Zalnieriute 'Technology, business and human rights' session chair at Academic forum of 'Innovate Rights: New Thinking on Business and Human Rights' Conference, UNSW Sydney
- **21 May** Hub director Lyria Bennett Moses speaks at refugee identity virtual event
- **24 May** Data as a Source of Market Power stream co-lead Katharine Kemp presents and provides conference paper at Competition Law Conference, Sydney (Hodgekiss)
- **23 May** Data Justice Stream lead Janet Chan hosts seminar on Security and risk technologies in criminal justice

- **4 Jun** Data as a Source of Market Power stream co-lead Rob Nicholls and Professor Chris Marsden (Sussex) are academic participants at Boardroom lunch at Twitter
- **6 Jun** Hub hosts talk on Interoperability as an algorithmic regulatory remedy: why transparency and replicability are not the solutions to machine learning problems, by Professor Chris Marsden
- **11–12 June** Hub research fellow Monika Zalnieriute presents at Data for Policy Conference, London, UK, on ‘Rule of Law and Automation in Government Decision-Making’.
- **18 Jun** Data as a Source of Market Power stream co-lead Rob Nicholls - Allens Training - Professor Chris Marsden guest in session chaired by Rob Nicholls
- **18 – 20 Jun** Hub research fellow Monika Zalnieriute ‘Rule of Law and Automation in Government Decision-Making,’ paper presentation at EuroDIG: European Dialogue on Internet Governance, The Hague, The Netherlands,
- **23–29 Jun** Hub Director Lyria Bennett Moses participates in cyber security dialogue in Berlin and Brussels
- **29 Jun** Platform Cooperativism stream lead Bronwen Morgan is a Panellist at launch of The Invisible Hand art exhibition at 4A Gallery of Contemporary Art, Sydney
- **8 Jul** Hub Director Lyria Bennett Moses speaks at the UNSW meet the professor series on, What Lawyers Need to Understand about Technology
- **15 Jul** Hub Director Lyria Bennett Moses talks at HKU Technology Law Symposium
- **15-17 Jul** Hub research fellow Monika Zalnieriute presents at 5th Biennial Crime, Justice and Social Democracy International Conference, Surfers Paradise, Australia on ‘Digital Justice Implications in Automation of Government Decision-Making,’
- **23 & 29 Jul** Hub Director Lyria Bennett Moses speaks at Allens AI roundtables in Melbourne and Sydney on Take us to your lawyer: robots, AI and the future of business
- **24 Jul** Platform Cooperativism stream lead Bronwen Morgan leads Dancing with UNSW Research Stars session
- **24 Jul** Data as a Source of Market Power stream co-lead Katharine Kemp presents at Digital Citizens Conference University of Melbourne
- **24 Jul** Hub director Lyria Bennett Moses speaks at Digital Citizens Conference on New Technologies: Rights, Responsibilities and Regulation at University of Melbourne
- **24 Jul** Hub research fellow Monika Zalnieriute presents at Digital Citizens Conference on Data, Surveillance and Automated decision-making at the rule of law and Retreat of Politics, at University of Melbourne
- **1 Aug** Hub hosts World Legal Summit in Sydney, in collaboration with Allens, UNSW and the Law Society of NSW
- **1 Aug** Hub research fellow Monika Zalnieriute presents ‘Data Privacy and Autonomous Vehicles’ presented at the Autonomous Machines panel, World Legal Summit organized by the Allens Hub
- **1 Aug** Data as a Source of Market Power stream co-lead Katharine Kemp presents at World Legal Summit
- **14 Aug** Platform Cooperativism lead Bronwen Morgan Panellist to launch *The Politics of the Common Good*, Gleebooks
- **28 Aug** Data as a Source of Market Power stream co-lead Katharine Kemp - “ACCC Report on Digital Platforms – What are the Implications?” - Webinar for Wolters Kluwer by Katharine Kemp, with Professor Caron Beaton-Wells
- **29 Aug** Hub director Lyria Bennett Moses speaks at Technology and the Future of the Legal Profession Lecture Series, at University of Queensland on Demystifying artificial intelligence: What lawyers really need to know about technology
- **29 Aug** Data Justice stream co-lead Janet Chan represents stream at UNSW Knowledge Exchange Research Showcase – The value of trust

- **3 Sep** Hub director Lyria Bennett Moses speaks at the Law Society NSW's 2019 Government Solicitors Conference on AI: Automated decision-making and the rule of law "By Design",
- **11 Sep** Data as a Source of Market Power stream co-lead Katharine Kemp presents at Meeting with Shadow Minister for Innovation and other Labor MPs
- **11 Sep** Hub director Lyria Bennett Moses speaks at Biometrics Institute meeting on legal issues in the use of open source / social media images for defence, national security and law enforcement purposes
- **19 Sep** Data Justice stream holds interdisciplinary WIP writing workshop
- **20 Sep** Hub director Lyria Bennett Moses and hub stream lead David Vaile participate as judges at the Allens internal debate in Melbourne
- **23 Sep** ABC interview hub research fellow Monika Zalnieriute and hub member Genna Churches on data retention review
- **Oct** Data as a Source of Market Power stream co-lead Rob Nicholls chairs ACCC and UniSA Competition Law & Economics Workshop, Adelaide
- **2 Oct** Hub director Lyria Bennett Moses participates as a panellist at the IPAC 'Right to Know Week Public Sector Leader's Symposium'
- **2 Oct** Hub director Lyria Bennett Moses presents at the National Judicial College on technology and the rule of law
- **14 Oct** Data Justice stream hub hosts talk by Microsoft researcher Luke Stark - Ethical AI for Whose Social Cause?
- **25 Oct** Data Justice stream co-lead Janet Chan presents the the annual Ray Whitrod Memorial Lecture at Flinders University's Centre for Crime Policy Resarch. The topic was "The Future of Artificial Intelligence in Policing".
- **28 Oct** Data as a Source of Market Power stream co-lead Rob Nicholls presentation as Guest lecture at Leicester University
- **28 Oct** Data as a Source of Market Power stream co-lead Rob Nicholls presentation as Guest lecture at Sussex University
- **30 Oct** Hub director Lyria Bennett Moses presented at the 'International Association of Law Libraries conference' on law and technology as a category of research.
- **Nov** Data as a Source of Market Power stream co-lead Katharine Kemp - panel interview at Singapore Fintech Festival, Singapore
- **Nov** Data as a Source of Market Power stream co-lead Katharine Kemp interviewing the interviewer, Professor Caron Beaton-Wells at Data (R)Evolution Conference, Consumer Policy Research Centre, Melbourne
- **1 Nov** Hub director Lyria Bennett Moses speaks at the Public Law Weekend event presents 'The Rule of Law by Design'
- **8 Nov** Data as a Source of Market Power stream co-lead Katharine Kemp is guest lecture at Digital Competition course for Melbourne University LLM
- **8 Nov** Data as a Source of Market Power stream co-lead Katharine Kemp provides keynote - "Concealed Data Practices" event for Competition Law & Economics Network, Melbourne University
- **8 Nov** Hub member Daniel Joyce moderates at roundtable at 'Law and the Media' conference
- **14/15 Nov** Data as a Source of Market Power stream co-lead Rob Nicholls provides keynote International Congress: The Digital Economy: Regulatory, Contractual and Competition Aspects
- **22 Nov** Hub director Lyria Bennett Moses invited to speak on 'The Rule of Law By Design' as part of the 'Artificial Intelligence Lecture Series'
- **22 Nov** Hub director Lyria Bennett Moses 'The Rule of Law by Design', paper presented to AGD, Canberra,
- **26 Nov** Hub director Lyria Bennett Moses provided the welcome at UNSW Grand Challenges event 'Using gene drive in wild populations'

- **29 Nov** Hub director Lyria Bennett Moses participates in the 'NSW AI Thought Leaders Summit'
- **2 Dec** Data Justice stream runs interdisciplinary roundtable 'Disrupting Data Injustices'
- **12-13 Dec** Platform Cooperativism lead Bronwen Morgan Poster presentation at International Cooperatives Association Asia-Pacific Branch Conference, Newcastle
- **12 Dec** Data Protection and Surveillance stream runs the event 'The Libra digital currency: an introduction to regulatory and technical issues'. Included presentations from the Fintech Stream.
- **12-15 Dec** Hub research fellow Monika Zalnieriute Rule of Law by Design?, presented at Asian Law & Society Annual Conference, Osaka, Japan.
- **18 Dec** NSW Department of Customer Service visit the new hub space and meet with hub representatives as part of a bid to form closer working relationships, in particular with the Technologies and the Rule of Law stream.

Hub Communications

Evaluating Success – As per the Hub's communications strategy document

Communications Method	Evaluation Target	Result
Quarterly Newsletter	Has 50 email addresses on the distribution list for the first newsletter. Has 25 recipients open it Click through rate of 15-20%	The newsletter mailing list has 500+ subscribers An average of 55.3% of subscribers opened the 2019 newsletters The average click through was 15.13%
Twitter	Has 200 followers by July 2018. Engagement rate with tweets 3%	Currently has over 580 followers and has made over 567 tweets.
Website	Website engagement oscillates as people look at events etc. The website also operates as a useful repository for media mentions, events, submissions and updates.	For months where we have data, around 300 sessions.
Media	The Hub appears in the media 10 times over a 12-month period	*During 2019 reference to the Allens Hub was mentioned in the media the following number of times. This had a potential audience reach of 3,992,000: Online: 69 Print: 3 TV: 2 <i>*Statistics provided from UNSW Media Coverage Stream report compiled on 28/02/2020. Period covers 28 Feb 2019 to 28 Feb 2020</i>
Research is being used in the public domain	We will collect and monitor this data in order to develop metrics over time. It is a complex area due to the variety of ways in which research is "used".	Seventeen submissions occurred, during 2019, encouraging policy engagement with Hub research.

Publications

Because publication years are often fluid, the list includes 2018 publications not included last year, all 2019 publications and some 2020 publications that are already available. The seven publications double reported from last year are asterisked.

Publications are organised by streams, briefly explaining the focus of publications this year. There are no 2019 publications for the technology for migrant worker protection and access to justice stream, but plenty of work on progress. In addition, Hub members have explored a variety of other topics in the field, and those publications are also included under relevant topic headings (cyber security, internet governance and human rights, technology and international law, ethical and legal issues for artificial intelligence and legal issues for the internet of things). The publications as a whole embrace theoretical, empirical and doctrinal approaches and a wide variety of issues. Some of these, such as (49) look at the relationship of law, technology and innovation at a broad level, while most others engage with specific questions that arise in a particular context.

Data Justice

Publications all engage in critical analyses of aspects of using technology for the legal/justice system or the regulation of technologies.

- (1) Chan, J. (2020). The Future of AI in Policing: Exploring the sociotechnical imaginaries. In J. McDaniel and K. Pease (eds), Policing and Artificial Intelligence. Routledge.
- (2) Sanders, C and Chan, J (2020). Challenging the effective integration and use of big data analytics in Canadian police. In D. Lyon (ed), Security in the era of big data. Vancouver: UBC Press.
- (3) Chan, J., & Bennett Moses, L. (2019). Can "Big Data" Analytics Predict Policing Practice?. In Security and Risk Technologies in Criminal Justice: Critical Perspectives. Canadian Scholars' Press.*
- (4) Weston, C., Bennett Moses, L., & Sanders, C. (2019). The changing role of the law enforcement analyst: clarifying core competencies for analysts and supervisors through empirical research. Policing and Society. doi:10.1080/10439463.2018.1564751*
- (5) Bennett Moses, L., & Chan, J. (2019). Big Data (in Sage Dictionary of Criminology). In E McLaughlin, & J Muncie (eds.), SAGE Dictionary of Criminology (4th ed). London: Sage.
- (6) J Chan (in collaboration with IMAGINARY), Game, <https://imaginary.org/project/i-am-ai-an-exhibition-on-artificial-intelligence>

Fintech

Publications address a broad range of cutting-edge technology-driven legal and regulatory issues in finance.

- (7) DW Arner, RP Buckley, DA Zetsche, B Zhao, A Didenko, C-Y Park and E Pashoska . (2019). Cryptocurrencies, Blockchain and ICOs: Policy and Regulatory Challenges of Distributed Ledger Technology and Digital Assets in Asia. In Brummer (Ed.), Cryptoassets: Legal and Economic Perspectives. Oxford University Press.*
- (8) DA Zetsche, RP Buckley, DW Arner & L Fohr (2019). The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators. Harvard International Law Journal.
- (9) Buckley, R.P., Arner, D., Veidt, R., Zetsche, D. (2019). Building Fintech Ecosystems: Why Regulatory Sandboxes Tend to Get the Plaudits and Innovation Hubs Do the Work of Promoting Development, Innovation and Competition in Financial Services. Web: <https://sites.duke.edu/thefinregblog/2019/10/08/building-fintech-ecosystems-why-regulatory-sandboxes-tend-to-get-the-plaudits-and-innovation-hubs-do-the-work-of-promoting-development-innovation-and-competition-in-financial-services/>
- (10) Buckley, R.P., Didenko, A., Arner, D.W., Park, C-Y., Zhao, B. (2019). Distributed Ledger Technology and Digital Assets in Asia. Blog: <https://www.law.ox.ac.uk/business-law-blog/blog/2019/08/distributed-ledger-technology-and-digital-assets-asia>.
- (11) Buckley, R.P., Zetsche, D.A., Arner, D.W. (2019). The Future of Data-Driven Finance: Building Better Financial Systems and Better Financial Regulation. Briefin, The European Banking Institute's Briefing on Financial Regulation, July 2019
- (12) Buckley, R.P., Zetsche, D.A., Arner, D.W. (2019). Regulating Libra. Harvard Law School Forum on Corporate Governance and Financial Regulation, July 10, 2019, <https://corpgov.law.harvard.edu/2019/07/10/regulating-libra/>.

- (13) Zetzsche, D., Buckley, R., & Arner, D. (2019). FinTech for Financial Inclusion: Driving Sustainable Growth. In J. Walker, Pekmezovic, & G. Walker (Eds.), *Sustainable Development: Harnessing Business to Achieve the SDG's through Financing, Technology and Innovation*. Wiley.*
- (14) Zetzsche, D., Buckley, R., Arner, D., & Didenko, A. (2019). A Comparative Analysis of the Liabilities Associated with Distributed Ledgers. In Madir (Ed.), *FinTech: Law and Regulation*. Edward Elgar, 285-207.
- (15) Buckley, R., Didenko, A., Zetzsche, D., & Arner, D. (2019). After Bitcoin: Central Bank-Linked Crypto Currencies. *European Journal of Comparative Law and Governance*.
- (16) Buckley, R.P., Didenko, A. (2019). Finding the Right Balance: A Toolkit for Regulating Digital Financial Services in Emerging Markets. *The Next Billion*, May 30, 2019, <https://nextbillion.net/regulating-dfs-emerging-markets/>.
- (17) Didenko, A., & Buckley, R. (2019). The Evolution of Currency: Cash to Cryptos to Sovereign Digital Currencies. *Fordham International Law Journal*, 42(4), 1041-1094. doi:10.2139/ssrn.3256066
- (18) Buckley, R.P., Avgouleas, E., Arner, D.W. (2019). Three Major Financial Crises: What Have We Learned? In Arner, Avgouleas, Busch & Schwarcz (eds), *Systemic Risk in the Financial Sector: Ten Years After the Great Crash*. CIGI Press, 47-68
- (19) Arner, D.W., Buckley, R.P., Zetzsche, D.A., Zhao, B., Didenko, A., Park, C-Y., Pashoka, E. (2019). Distributed Ledger Technology and Digital Assets: Policy and Regulatory Challenges in Asia. ADB Report, June 2019, 1-50, <https://www.adb.org/publications/distributed-ledger-technology-digital-assets-asia>
- (20) Arner, D. W., Zetzsche, D. A., Buckley, R. P., & Barberis, J. N. (2019). The Identity Challenge in Finance: From Analogue Identity to Digitized Identification to Digital KYC Utilities. *European Business Organization Law Review*, 20(1), 55-80. doi:10.1007/s40804-019-00135-1*
- (21) Arner, D.W., Buckley, R.P., Barberis, J. (2019). A FinTech and RegTech Overview: Where We Have Come from and Where We are Going. In J Barberis, DW Arner and RP Buckley (eds), *The RegTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation*, John Wiley & Sons, 2019, vi-xi.
- (22) Arner, D.W., Buckley, R.P., Zetzsche, D.A. (2019). FinTech, RegTech and Systemic Risk: The Rise of Global Technology Risk. In Arner, Avgouleas, Busch & Schwarcz (eds), *Systemic Risk in the Financial Sector: Ten Years after the Great Crash*. CIGI Press, 69-82
- (23) Barberis, J, Arner, D.W., Buckley, R.P. (eds) (2019). *The RegTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation*. John Wiley & Sons.
- (24) Panisi, F., Buckley, R.P., Arner, D.W. (2019). Blockchain and Public Companies: A Revolution in Share Ownership Transparency, Proxy-voting and Corporate Governance? *Stanford Journal of Blockchain Law & Policy*, 2, 2.
- (25) Panisi, F., Buckley, R.P., Arner, D.W. (2019). Can Blockchain Create a Corporate-Governance Revolution at Public Companies? The CLS Blue Sky Blog, July 1, 2019, <http://clsbluesky.law.columbia.edu/2019/07/01/can-blockchain-create-a-corporate-governance-revolution-at-public-companies/>.
- (26) Zetzsche, D.A., Buckley, R.P., Arner, D.W. (2019). The Rise of TechFins: Regulatory Challenges. In Madir (ed), *FinTech: Law and Regulation*. Elgar, 280-301
- (27) Zetzsche, D.A., Arner, D.W., Buckley, R.P., Weber, R. (2019) *The Road to RegTech: EU's Big Bang II and its Future of Data-Driven Finance*. Paper for the European Banking Institute, Feb 2019.

Data as a Source of Market Power

Short pieces in *The Conversation* explaining the ACCC's Digital Platforms inquiry and report.

- (28) Nicholls, R., Kemp, K. (2019). The federal government's response to the ACCC's Digital Platforms Inquiry is a let down. *The Conversation*, 12 December 2019. <https://theconversation.com/the-federal-governments-response-to-the-acccs-digital-platforms-inquiry-is-a-let-down-128775>.
- (29) Nicholls, R., Kemp, K. (2019). The ACCC is suing Google over tracking users. Here's why it matters. *The Conversation*, 29 October 2019. <https://theconversation.com/the-accc-is-suing-google-over-tracking-users-heres-why-it-matters-126020>.

- (30) Kemp, K. (2019). Here's how tech giants profit from invading our privacy, and how we can start taking it back. *The Conversation*, 12 August 2019. <https://theconversation.com/heres-how-tech-giants-profit-from-invading-our-privacy-and-how-we-can-start-taking-it-back-120078>
- (31) Nicholls, R., Kemp, K. (2019). Consumer watchdog calls for new measures to combat Facebook and Google's digital dominance. *The Conversation*, 26 July 2019. <https://theconversation.com/consumer-watchdog-calls-for-new-measures-to-combat-facebook-and-googles-digital-dominance-120077>

Data Protection and Surveillance

Publications address a range of contemporary issues in digital surveillance, metadata retention and access, and data privacy more broadly.

- (32) Churches, G., & Zalnieriute, M. (2019). Unlawful metadata access is easy when we're flogging a dead law. *The Conversation*, 10 December 2019. <https://theconversation.com/unlawful-metadata-access-is-easy-when-were-flogging-a-dead-law-127621>.
- (33) Greenleaf, G. (2018). Data privacy in Asia. In S. Chesterman (Ed.), *Data Protection Law in Singapore Privacy and Sovereignty in an Interconnected World* (2nd Ed) (2 ed., pp. 459-508). Academy Publishing. Retrieved from <https://www.sal-e.org.sg/data-protection-law-in-singapore-privacy-and-sovereignty-in-an-interconnected-world-2nd-edition>
- (34) Clarke, R. (2019) Beyond De-Identification Record Falsification to Disarm Expropriated Data-Sets. In *Humanizing Technology for a Sustainable Society*. University of Maribor Press. doi:10.18690/978-961-286-280-0.8
- (35) Clarke, R. (2019). Risks inherent in the digital surveillance economy: A research agenda. *Journal of Information Technology* 34(1), 59-80. doi:10.1177/0268396218815559
- (36) Clarke, R. (2019). Future-oriented research agendas and competing ideologies: Responses to commentaries on 'The digital surveillance economy'. *Journal of Information Technology*, 34(1), 96-100. doi:10.1177/0268396218815564

Platform Co-operativism

Publications help widen the conversation about the legal and regulatory dimensions of how technology can help to develop innovative business models that foster more sustainable trajectories for economic development. The work of this stream also includes participation in different policy fora via a global multi-authored policy statement on corporate governance reform, a successful submission to the Australian Law Reform Commission calling for consideration of new legal models for social enterprise, and via an extended and ongoing engagement with the City of Sydney Sustainability Strategy 2050 process, working with the newly formed Sydney Commons Lab.

- (37) Morgan, B., & Kuch, D. (2019). Diverse legalities: Pluralism and Instrumentalism. In K. Gibson, & K. Dombrowski (Eds.), *Handbook of Diverse Economies*. Cheltenham, UK: Edward Elgar.
- (38) Morgan, B. (2019). Transcending the Corporation: Social Enterprise, Cooperatives and Commons-Based Governance. In T. Clarke, J. O'Brien, & C. R. T. O'Kelley (Eds.), *The Oxford Handbook of the Corporation* (pp. 667-686). Oxford University Press.
- (39) Multiple authors (including Morgan, B.). (2019). *Corporate Governance for Sustainability* (Policy Paper).
- (40) Hampson, J., Santala, I., Potts, M., Suhood, T., Morgan, B., Draft Proposal for a Commons Transition Plan for the City of Sydney https://wiki.p2pfoundation.net/Draft_Proposal_for_a_Commons_Transition_Plan_for_the_City_of_Sydney. (Engagement through Sustainability Strategy 2050, Sharing Cities Action Task Force, P2P Foundation)

Hybrid Life and Legal Personhood

Publications examine the impact of hybrid formations on the relation between life and law.

- (41) De Leeuw, M., Van Wichelen, S. (eds). (2019). *Personhood in the Age of Biolegality*. Brave New Law. Palgrave Macmillan, New York. Web: <https://link.springer.com/book/10.1007%2F978-3-030-27848-9>.
- (42) De Leeuw, M., Van Wichelen, S. (2019). Legal Personhood in Postgenomic Times: Plasticity, Rights, and Relationality. In M. De Leeuw and S. Van Wichelen (eds), *Personhood in the Age of Biolegality*. Brave New Law. Palgrave Macmillan, New York.

Reinventing Intellectual Property

Publications (and presentations throughout the year) show an interest in the impact of technology on the traditional contours of IP laws and enforcement mechanisms and governance structures.

- (43) Burrell, R., & Handler, M. (2019). Keyword Advertising and Actionable Consumer Confusion. In T. Aplin (Ed.), *Research Handbook on Intellectual Property and Digital Technologies*. Cheltenham, UK: Edward Elgar.
- (44) Greenleaf, G., & Lindsay, D. (2018). *Public Rights Copyright's Public Domains* (1 ed.). Cambridge University Press. doi:10.1017/9781316460214.

Technologies and the Rule of Law

The first 4 listed publications focus on the rule of law and technology in various contexts of government decision-making and policy, including public administration, voting and democracy, and enforcement of law. The fifth publication focused on the impact of technologies for judicial decision making and judicial values, which also overlap with the values of rule of law.

- (45) Zalnieriute, M., Bennett Moses, L., Williams, G. (2019). The rule of law and automation of government decision-making. *Modern Law Review*, 82(3), 425-455. doi:10.1111/1468-2230.12412
- (46) Zalnieriute, M., Burton, L., Boughey, J., Bennett Moses, L., & Logan, S. (2020). From the Rule of Law to Statue Drafting: Legal Issues for Algorithms in Government Decision-Making. In Woodrow Barfield (ed.) *Cambridge Handbook on Law and Algorithms*, Cambridge University Press, UK. SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3380072
- (47) Zalnieriute, M., Bennett Moses, L. & Williams, G. (2020). Automating Government Decision-Making: Implications for the Rule of Law. In S. de Souza, M. Spohr (eds), *The Future of Law: Technology, Innovation and Access to Justice*, Edinburgh University Press.
- (48) Bennett Moses, L., Zalnieriute, M. (2020) Law and Technology in the Dimension of Time. In Sofia Ranchordas and Yaniv Roznai (eds) *Time, Law and Change: An Interdisciplinary Study*, Hart Publishing. SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3461408
- (49) Zalnieriute, M., Bell, F. (2020). Technology and Judicial Role. In G. Appleby and A. Lynch (eds.), *The Judge, the Judiciary and the Court: Individual, Collegial and Institutional Judicial Dynamics in Australia*. Cambridge University Press, UK.

Cyber security

- (50) Manwaring K; Hanrahan P, (2019). 'BEARing responsibility for cyber security in Australian financial institutions: The rising tide of directors' personal liability. *Journal of Banking & Finance Law and Practice*, 30, 20 – 42.

Internet governance and human rights

- (51) Zalnieriute, M., & Milan, S. (2019). Internet Architecture and Human Rights: Beyond the Human Rights Gap. Policy and Internet. <https://doi.org/10.1002/poi3.200>.
- (52) Zalnieriute, M. (2019). Digital Rights Of LGBTI Communities: A Roadmap For A Dual Human Rights Framework. In *Research Handbook on Human Rights and Digital Technology Global Politics, Law and International Relations*. Edward Elgar Publishing.
- (53) Zalnieriute, M. (2019). From Human Rights Aspirations to Enforceable Obligations by Non-State Actors in the Digital Age: The Case of Internet Governance and ICANN. *Yale Journal of Law and Technology*, 2278 – 335. doi:10.2139/ssrn.3333532
- (54) Zalnieriute, M. (2020). Google LLC vs CNIL. *American Journal of International Law*, 114(2).
- (55) Zalnieriute, M. (2020). Beyond the Governance Gap in International Domain Name Law: Bringing the UDRP in Line with Internationally Recognized Human Rights. *Stanford Journal of International Law*, 56(1).

Technology and international law

- (56) Johns, F., & Grolman, L. (2019). Big Data and International Law. In *Oxford Bibliographies in International Law*. Oxford University Press. doi:10.1093/OBO/9780199796953-0176

- (57) Zalnieriute, M. (2018). Developing a European Standard for International Data Transfers after Snowden: Opinion 1/15 on the EU-Canada PNR Agreement. *Modern Law Review*. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-2230.12378?af=R>

Ethical and legal issues for artificial intelligence

- (58) Clarke, R. (2019). Regulatory alternatives for AI. *Computer Law and Security Review*, 35(4), 398-409. doi:10.1016/j.clsr.2019.04.008
- (59) Clarke, R. (2019). Principles and business processes for responsible AI. *Computer Law and Security Review*, 35(4), 410-422. doi:10.1016/j.clsr.2019.04.007
- (60) Clarke, R. (2019). Why the world wants controls over Artificial Intelligence. *Computer Law and Security Review*, 35(4), 423-433. doi:10.1016/j.clsr.2019.04.006

Legal issues for internet of things

- (61) Manwaring K., Hall C. (2019). Input Paper for ACOLA Horizon Scanning Series: The Internet of Things: Maximising the benefit of deployment in Australia. SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3464277

Legal education

- (62) Steel, A., Bennett Moses, L., Laurens, J., Brady, C., Use of E-exams in High Stakes Law School Examinations: Student and Staff Reactions. *Legal Education Review*, 29(1), 1.

PhD theses

Manwaring, K. (2019). *Surfing the third wave of computing: consumer contracting with eObjects in Australia*.

Hub member grants

- ARC Discovery (2018-) on Digital Humanitarianism (<http://datapolicy.law.unsw.edu.au/>) with Professor Fleur Johns, Associate Professor Wayne Wobcke and Research Associate Caroline Compton.
- Cyber Security Cooperative Research Centre (2019) on Cyber Security Law and Policy with Professor Lyria Bennett Moses and Dr Heejin Kim
- Social Sciences and Humanities Research Council (Canada), Partnership Development Grant (2017-2020) on Conceptions of Police Intelligence: Building a Cross-National Comparative Analysis of Practices and Frameworks with Professor Janet Chan, Professor Lyria Bennett Moses and partners from Wilfred Laurier University, York University, Victoria University Wellington.
- ARC Linkage Academy Special Project (2018-2020) on The Use of Big Data for Social Policy: Benefits and risks with Professor Janet Chan
- ARC Discovery (2020-) on Realising big data's potential to address social and health inequities with Data Justice Network members Niamh Stephenson and Claire Vajdic.
- International Association of Privacy Practitioners to produce a report on (mis)Informed Consent: Privacy, unfair contract and unconscionable conduct with team co-leads Katharine Kemp and Rob Nicholls and hub member, Kayleen Manwaring
- Stream lead Rob Nicholls received a grant to develop a webinar and video material on cyber security for Energy Consumers Australia
- ARC Discovery International Association of Privacy Professionals – Australia / New Zealand Chapter grant for \$30,000 on Privacy, Technology and Domestic and Family Violence: Assessing Standards in Australia and New Zealand (Hub is part of grant led by Australian Human Rights Institute)

Hub Submissions 2019 (including joint submissions)

- (1) Primary author: Bhathela, N., Participants/Researchers: Bennett Moses, L., Zalnieriute, M., Clarke, R., Manwaring, K., Bowrey, Bell, F., and Kearnes, M. Response to Artificial Intelligence: governance and leadership' White paper Consultation. DOI: <http://dx.doi.org/10.2139/ssrn.3352329>.
- (2) Joyce, D. Submission: Review of Model Defamation Provisions <https://www.allenshub.unsw.edu.au/sites/default/files/inline-files/Defamation%20Review%20Submission.pdf>
- (3) Zalnieriute, Z., Gould-Fensom, O. Submission to the Department of Industry, Innovation and Science: Artificial Intelligence: Australia's Ethics Framework <https://www.allenshub.unsw.edu.au/sites/default/files/inline-files/Data61%20FINAL%2003%20June%20MZ%20%28002%29.pdf>
- (4) Clarke, R. Submission to the Department of Industry, Innovation and Science: Artificial Intelligence: Australia's Ethics Framework <http://www.rogerclarke.com/EC/AAISub-1905.html>
- (5) Zalnieriute, Z., Bennett Moses, L., Boughey, J., Burton Crawford, L. and Bhathela, N. Submission to Submission to the OHCHR Thematic report to the United Nations General Assembly on digital technology, social protection and human rights https://www.ohchr.org/Documents/Issues/Poverty/DigitalTechnology/UNSW_Sydney_Faculty_of_Law.pdf
- (6) Vaile, D., Wijeyaratne, S., Zalnieriute, Z. and Churches, G. Submission: Telecommunications Data Retention Review in the Telecommunications (Interception and Access) Amendment (Data Retention) Act 2015, <https://www.allenshub.unsw.edu.au/sites/default/files/inline-files/Data%20Retention%20review%20submission.pdf>
- (7) Churches, G., Zalnieriute, M. and Bennett Moses, L., Submission to the 'Review of the Identity-matching Services Bill 2019 and the Australian Passports Amendment (Identity-matching Services) Bill 2019', being undertaken by the PJICIS <https://www.allenshub.unsw.edu.au/news/submission-pjicis-identity-matching-services>
- (8) Churches, G., Zalnieriute, M. and Greenleaf, G. Submission: NSW Department of Communities and Justice Inquiry into Adopting a Mandatory Reporting Scheme for Data Breaches, <https://www.allenshub.unsw.edu.au/news/submission-nsw-mandatory-reporting-scheme-data-breaches>
- (9) Zalnieriute, M., Bennett Moses, L., & Williams, G. (2019). Submission to the Senate Community Affairs References Committee's Inquiry into Centrelink's Compliance Program. Retrieved from https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Centrelinkcompliance/Submissions
- (10) Zalnieriute, M., & Churches, G. (2019). Submission to Review of the Australian Federal Mandatory Data Retention Regime. SSRN: <https://ssrn.com/abstract=3416959>
- (11) Zalnieriute, M., & Gould-Fensom, O. (2019). Artificial Intelligence: Australia's Ethics Framework Submission to the Department of Industry, Innovation and Science. Retrieved from <https://ssrn.com/abstract=3399276>
- (12) Johns, F., Compton, C., Zalnieriute, M., Bennett Moses, L., McAdam, J., & Goodwin-Gill, G. (2019). Submission to the UNHRC's Global Virtual Summit on Digital Identity for Refugees 'Envisioning a digital identity ecosystem in support of the Global Compact on Refugees'. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3380116
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- (19) Lyria Bennett Moses, George Williams, Monika Zalnieriute, Submission to the Joint Standing Committee on Electoral Matters Inquiry into the 2019 Federal Election, 20th September 2019, restricted from publication until Committee release, but could be provided.

FLIP Stream Events and Publications

	Item	Authors	Date
1	<i>Australian Law Journal</i> note – ‘Lawyers and Technology’s Black Box’	ML and FB	Forthcoming Feb 2020
2	Three book chapters in Legg, Vines and Chan, <i>The Impact of Technology and Innovation on the Well-Being of the Legal Professional</i> (Intersentia, forthcoming) ‘The Changing Field of Lawyering and Its Impact on Practice and Wellbeing’ (ML with Chan and Vines) ‘Artificial Intelligence and Lawyer Wellbeing’ (FB, JR & ML) ‘Lawyers’ Fee Arrangements and their Wellbeing’ (ML and JR)	ML, JR and FB	Forthcoming 2020
3	Book chapter in <i>The Judge, the Judiciary and the Court</i> (Cambridge UP) Appleby and Lynch (eds) – ‘Technology and the Judicial Role’	FB and Monika Zalnieriute	Forthcoming 2020
4	FLIP Inquiry Series - Behind the Buzzwords: ‘Change Management’ Panel	JR	3 December 2019
5	Article – ‘The Ethical AI Lawyer: What is Required of Lawyers When They Use Automated Systems?’ published in <i>Law, Technology and Humans</i> , https://lthj.qut.edu.au/issue/view/83	JR and FB	27 November 2019
6	Presentation – Taking Justice Online: A Critical Perspectives Workshop, Monash University Law School	ML	26 November 2019
7	Book chapter in <i>Wellness for Law: Making Wellness Core Business</i> (LexisNexis) Marychurch and Sifris (eds) – ‘Lawyers’ Wellbeing in the (Robotic) Face of Technological Change’ https://store.lexisnexis.com.au/products/wellness-for-law-making-wellness-core-business-skuwellness_for_law_making_wellness_core_business	FB, JR & ML	21 November 2019
8	Presentation – ‘Artificial Intelligence and Client Consent in the Lawyer-Client Relationship’, Positioning the Politics of Consent in Law and History Symposium, UTS Law	FB	8 November 2019
9	LSJ Article – ‘Change leadership for a dynamic profession’	JR and FB	October 2019
10	Lawyers Weekly Article – ‘Best practice change strategies to transform your firm’ (https://www.lawyersweekly.com.au/biglaw/26406-best-practice-change-strategies-to-transform-your-firm)	Tony Song (FLIP Stream intern)	3 September 2019
11	World Legal Summit – FLIP Stream segment ‘Regulation for artificial intelligence applications in the legal profession’ (Panel and report)	FB and JR	5 August 2019
12	2019 Annual FLIP Conference presentation – ‘Change Leadership for a Dynamic Profession’	JR and FB	25 July 2019
13	<i>Macquarie Law Journal</i> special edition - Editorial (FB and ML) Article - ‘The Automation Paradox in Litigation’ (ML, D Caruso, J Phoustanis) Article - ‘Family Law, Access to Justice and Automation’ (FB)	ML and FB	July/August 2019
14	FLIP Inquiry Series - Behind the Buzzwords: ‘Transformation’ Panel	JR	29 April 2019
15	Presentation – Law Society’s Professional Skills Subcommittee - Impact of technology and innovation on professional skills	JR	11 April 2019
16	FLIP Seminar in Banco Court - ‘Artificial Intelligence and the Legal Profession’ (FB and ML); ‘Technology, Innovation and Lawyer Wellbeing’ (FB and JR); ‘The Future of Courts - Disruption Under Law’ (ML)	ML, JR and FB	10 April 2019
17	Presentation - FLIP Regulatory Subcommittee - Regulation of AI legal tools	FB	9 April 2019

	Item	Authors	Date
18	FLIP Regional Roadshow Presentations - 'Technological innovation for the legal profession'	FB (Wollongong, Byron Bay), LBM (Newcastle)	15 March, 5 April, 2 May 2019
19	Panel - 7th National Access to Justice and Pro Bono Conference 2019 – 'Artificial Intelligence: How will it Impact Lawyers and their Clients' Panel	FB	14 March 2019
20	Presentation – JPMorgan APAC Legal Department – 'AI: Frenemies for Lawyers'	ML and FB	6 March 2019
21	The FLIP Inquiry Series - Behind the Buzzwords: 'RegTech' Panel	ML	27 Feb 2019
22	Presentation - Wellness for Law Forum (Monash) – 'Artificial Intelligence and Lawyer Wellbeing'	FB	15 Feb 2019
23	Op ed, <i>The Australian</i> – 'Technology must be a tool, not used as a tutor'	ML and FB	15 Feb 2019
24	AI and the Legal Profession Primer and Confidential Recommendations for Law Society (AI and Legal Profession)	ML and FB	Jan 2019

Financial Summary



UNSW
SYDNEY

THE ALLENS HUB
FOR TECHNOLOGY, LAW & INNOVATION

Management Report

YTD For December 2019

	Dec YTD	Note	Nov17-Dec18
REVENUE	\$		\$
Sponsorship (Allens)	260,000	1	520,000
Interest	9,575.26		10,671
UNSW Law Contribution		2	100,000
UNSW G&T Contribution	5,000	3	
TOTAL REVENUE	274,575		630,671
EXPENSE			
People Costs	223,534		182,546
Contract & Consulting Services	615		9,463.15
Entertainment	185		
Marketing	22		1,315
Consumables	2,886		12,759
Travel	9,969		24,140
Equipment Non capitalised	939		
Other Expenses			7,685
Stream Funding	58,980		
Internal Expense (Courier Charge)	39		3,196
TOTAL EXPENSE	297,169		241,104
Operating result for the period	(22,594)		389,568
Carried Forward Balance	389,568		
Retained Funds Surplus/(Deficit)	366,974		389,568

Notes to Statement

1. The income in Reporting Period Nov17-Dec18 is for income received for 26 months of operations for 2017-19. The income in 2019 is for 12 months covering 2020.
2. In Nov17-Dec18, contribution was from LAWSCHOOL
3. Contribution from the Gilbert and Tobin Centre is to cover half of the joint stream Technologies and the Rule of Law

Appendix

Steering committee (2019)

Lyria Bennett Moses – Director of the Hub

Michael Legg – Director of FLIP Stream

Anna Collyer – Head of Innovation at Allens

Heather Moore, senior manager strategy and projects from March 2019

Andrea Durbach (from Jul 2019. Previous was Justine Nolan) –Professor in the Faculty of Law at UNSW Sydney

Maurice Pagnucco – Professor of Computer Science and Engineering, Deputy Dean (Education) of the Faculty of Engineering and Head of the School of Computer Science and Engineering at UNSW

Advisory board (2019)

Daniel Petre (Retired as at July 2019)	Co-founder and Partner, AirTree Ventures
Richard Harvey	President, The Law Society of New South Wales
George Williams	Dean, UNSW Law
Ian McGill	Partner, Allens
Graham Greenleaf	Professor of Law & Information Systems, UNSW
Jonathan Horan	Partner, Linklaters
John Fitzgerald	General Counsel & Company Secretary, AGL
John Price	Commissioner, Australian Securities and Investments Commission
Stephen Burley	Honourable Justice, Federal Court
Katrina Johnson	Associate General Counsel & Head of ACAP Legal, Uber
Lyria Bennett Moses	Director, Allens Hub for Technology, Law and Innovation
Michael Legg	Flip Stream Director, UNSW
Michelle Price	COO, AustCyber
Narelle Clark	Pavonis Consulting
Rachael Falk	CEO, Cyber Security Cooperative Research Centre
Rebecca Lim	Group Executive, compliance, legal & secretariat, Westpac
Warren Kalinko	CEO, Keypoint Law